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NOTES:**

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## Origins and Destinations Study of Older Persons

### Background

The purpose of this research was to provide insight into the travel behavior and transportation needs of older persons in Pima County. Issues such as travel in the home community, barriers to mobility, and transportation needs among older adults (seniors) have not been well researched. In this study seniors are defined as people 55 and older.

### Methods

A first project component included interviews with 20 mobility impaired seniors. Participants were identified through *My House Senior Living*, an organization that works with mobility impaired populations. Interviewees were asked with whom they live; where they need to go and how they get there; if they use public transportation, how difficult it is to use, and what would make it easier; and problems they have experience related to transportation.

The first survey effort was a travel diary. Data were collected for 12 months, October 2006 through September 2007. A convenience sample of 135 seniors who visit senior centers was asked to complete a diary one day a month. There were eight senior centers in Pima County where individuals were con-

tacted including those in Tucson, Green Valley, Marana and Ajo.

Participants were enlisted and provided their year's worth of diaries in English or Spanish. Participants were sent monthly post card reminders shortly before their assigned date. The diary asked for travel origin, destination, time of travel, purpose of travel, and form of transportation used. It also asked what barriers related to transportation were encountered.

The final data collection effort was a mail survey to a random sample of 1,500 older adults in Pima County. A list was purchased from Survey Sampling, Inc. The survey focused on perceived barriers to travel in the community, and transportation needs and issues. Controlling for non-deliverable surveys, a 52% response rate was achieved for a final sample of 760. This is generally considered to be a good response rate.

### Findings

Interviews with mobility impaired seniors were conducted with 14 women and six men. Two of the interviewees are in their 40s, eight in their 60s, and five each in their 70s and 80s. Of this group, 15 live alone, three live with a spouse and child, and two with a child.

Findings include:

- All the interviewees go to the doctor and most to the pharmacy quite regularly. When they need to go somewhere, eight have a family member who can take them (a son or daughter, in one case a niece and in another a parent). They also reported that other people or services are available to assist them.
- The interviewees were asked if they have a contact in case of emergency. Twelve reported that they do (usually a son or daughter, in one case a niece, and in another a neighbor). One named 911.
- Of those who pay for transportation, most use VanTran which charges a fairly small fee. Only four respondents use public transportation.

Respondents for the diary study were recruited from senior centers in several communities in Pima County. This group can not be assumed to represent seniors in general, but can provide some insight into the driving behavior and transportation needs of older people in the county.

- The respondents from the senior centers are mostly women and range in age from 52 to 97 (average of 73 years). Most are retired. Most have high school level educations or less. Incomes are also low, with nearly a third making \$20,000 or less. Most live alone or with a spouse, and rate their health as fair or good.
- Most of the respondents are still driving. Most also still own a vehicle. Those respondents that still have a spouse (n=69) indicated that they do not drive, are retired, and are generally in fair to good health.
- More than half of the respondents from senior centers indicate they have reduced the amount of driving they do in the past two

years. Almost a third have stopped driving all together. The highest percentage reported that they avoid driving at night, avoid high traffic times, drive fewer miles, avoid driving long distances, and avoid driving in bad road conditions. The most common reason they provide for changes in driving is that they no longer work.

- The most frequent daily destination of respondents is the senior center, obviously an artifact of the sample that would not emerge with a general population of seniors. This is followed by trips to a store or grocery store. The most frequent trip purpose is going out for meals. This finding is likely more common among the senior center respondent than it would be among a general group of respondents as many go to the senior center to eat lunch.
- When seniors leave home, they most often drive their own cars. A distant second form of transportation is riding with another person. Public transportation is not used often. When respondents do take alternative forms of transportation, they usually do not have to pay for the ride. The average number of miles is 15 per trip and the median is about eight miles. They most often leave home in the morning, either during “rush hour” or later in the morning and return in early afternoon. Seniors in this group rarely are out of the house at night.
- On a weekly basis respondents reported they tend to go somewhere from zero to 40 times (an average of eight) per week. They most often go to the senior center though this is not typical of seniors in general. They also go to the store or grocery store quite often, as well as out to eat. The respondents go to the doctor, various events, to visit friends, to visit family, and to church fairly frequently. They rarely noted encountering problems with transportation.

The purpose of the mail survey was to gather transportation related information from seniors in various zip codes within the Pima County boundaries.

- The average age of respondents (n=760) is 70.4 years old, with 69.1% being male. The majority of respondents are either married or live with a partner.
- The majority of respondents are still experiencing good health. Most have also been able to maintain the same level of leisure activity participation over the past couple of years.
- Most of the respondents have a driver's license and continue to drive. Roughly two-thirds of respondent households have at least one person who drives.
- As they have gotten older, respondents have altered their driving habits in many ways. In the past two years, 42.3% of respondents reduced the amount of driving they did. Only 8.6% have stopped driving completely in the past two years. About 24% report driving for less time and fewer days during the week. A large number of respondents report driving fewer miles per week, avoid driving at night, and avoid driving during busy traffic times.
- Of the types of transportation available, most of the respondents prefer to drive themselves, while many ride with family or a friend. Very few use public transportation.
- On the day prior to taking the survey, respondents reported that they left their residence to go out up to 10 times, with most taking one trip or two trips. The majority drove themselves on those trips. Of those who didn't go out that day, most noted the reason was because they did not need to go anywhere as opposed to experiencing a barrier of some nature.
- If unable to drive in the future, the majority of respondents (71.5%) would prefer to ride

with a family member or friend in a private vehicle. A large number, more than a quarter, however, commented that they do not know how they would get around if unable to drive.

- Respondents who needed to ride with someone else most often rode with a spouse, son or daughter, neighbor, or friend. Most of the time the respondents felt that it was either no problem, or just a small problem, to find a ride with someone else. Quite a large number of respondents feel that it would be difficult to reside in their current home if they were no longer able to drive.
- There is a very high satisfaction rating among respondents regarding the ability to get around in their community with 47.4% being satisfied and 35.3% being very satisfied. Respondents feel the quality of transportation available in their community is fair to good, but their satisfaction with the quality of dependable public transportation and variety of transportation ranges mostly from very poor to fair.
- Most respondents feel that the biggest concerns in their communities are inconsiderate drivers, dealing with traffic congestion, hectic traffic, and poor road conditions.
- A large number of respondents have no knowledge of public transportation available in their communities. The majority of respondents report no use of public transportation in the two months prior to this survey.
- There are many different problems with public transportation reported by the respondents of this survey. Some problems of the highest concern are accessibility (getting to the stop or station), transportation does not go where they need to go, takes too much time, and no adequate shelter from the weather while waiting.

- About 24% have moved to a new residence since they stopped driving and, of those, most cite transportation problems as their reason for moving.
- Non-drivers noted that problems with transportation most heavily affect going to the doctor, shopping, and recreation and social activities.

## Conclusions

Data show that those seniors at the senior centers are more at risk than those surveyed through the mail. Because of the lower socioeconomic status, the senior center sample is more likely to experience greater transportation related problems.

Seniors are responsible for most of their own transportation needs. At the same time, seniors' driving habits are changing. Though self-reliance is likely desirable, older seniors will need transportation alternatives as they reduce and, ultimately, stop driving. Seniors need more transportation options to stay active and involved. Several of the study's findings suggest their ability to continue to be active and to maintain a fulfilling lifestyle is harmed by lack of transportation.

While 71% of the mail survey respondents would prefer a friend or family member to drive when they cannot, seniors who live alone, and those with limited family and social networks, may have few options.

Forty percent of respondents have no knowledge of public transportation services available in their communities. Those who do know about it rarely use it primarily because they feel it does not go where needed, is not accessible, there is inadequate shelter from the

weather while waiting, and it takes too much time. The lack of knowledge and use of public transportation is a concern as this is clearly an option for seniors who are no longer able to drive but are still mobile enough to do some walking. Seniors feel that improving the quality of transportation services in the community will involve more dependable transportation (49%) and having a variety of options for transportation services (48%).

## Recommendations

While seniors who are currently using senior centers are actively involved, the fact that they have more risk factors will require programs and services be more proactive in keeping them engaged in the community. Planners will likely need to work with health care and in-home service providers as well as community-based service providers.

While the vast majority of seniors are still driving, other resources will be required as more and more of them are unable to operate a motor vehicle safely. Since the majority of seniors do not currently know of, and/or use public transportation, a significant effort will need to be put into outreach and education regarding transportation alternatives when driving is no longer an option.

Since many seniors are voluntarily cutting back on their driving, community organizations, businesses, and churches should be encouraged to support alternative transportation options to keep seniors involved.

More housing options for seniors need to be developed that are near medical and shopping services so that seniors have greater access.

The full report: *Origins and Destinations Study of Older Persons* by Kathleen Andereck and James McCabe, 8134 W. Palmdale Ave., Glendale, AZ 85303 (Arizona Department of Transportation, report number FHWA-AZ-08-614, published June 2008) is available on the internet. Educational and governmental agencies may order copies from the Arizona Transportation Research Center, 206 S. 17 Ave., mail drop 075R, Phoenix, AZ 85007; phone 602-712-3138. Businesses may order copies from ADOT's Engineering Records Section.